

**PHV6****ECONOMIC EVALUATION OF A SAFETY DEVICE FOR SUBCUTANEOUS INJECTIONS OF LOW MOLECULAR WEIGHT HEPARIN (LMWH)**Durand-Zaleski I<sup>1</sup>, Gabriel S<sup>2</sup>, Dinét J<sup>2</sup><sup>1</sup>Hôpital Henri-Mondor, Creteil, France; <sup>2</sup>Health Economics Department, Sanofi-Synthelabo, Bagneux, France

Subcutaneous injections account for an increasing share of total needle-stick injuries (NSI). **OBJECTIVE:** The objective was to document the possible cost savings related to the introduction of a protected needle (safety shaft) used to administer LMWH. **METHODS:** We estimated the frequency and the costs of NSI attributable to treatment with LMWH in a tertiary care hospital, and modeled a countrywide estimate. **Risks:** We collected data on yearly NSI due to recapping in a large tertiary care center and related this figure to the total number of needles used. We derived a risk of NSI per 100,000 needles used and multiplied it by the number of injections with LMWH per year in hospitals countrywide. **Costs:** we estimated the cost of a NSI from the resources used in the hospital to manage personnel after a NSI. The actual resources used were prospectively collected during the year 1997 and were compared to other observed data (hospital survey). From these data we built a decision tree and compared the results to the recommended practice. **Costs** were estimated from the viewpoints of both hospital and society. **Infection:** the costs related to the risk of viral infection were not included. **RESULTS:** The rate of NSI due to recapping was 5.2 per 100,000 punctures, the total number of LMWH needles used in hospitals was 14,861,000. The total societal cost of managing a NSI was assessed to be \$1919 assuming that all the recommended procedures were followed. From the hospital viewpoint, the cost became \$1174. The large discrepancy between recommended and actual practice lead to significant reductions in costs. The potential savings linked to the use of the safety device were conservatively estimated. **CONCLUSION:** Using safer devices for LMWH injections may result in cost savings by reducing the costs of NSI management.

**PHV7****MANAGING PNEUMOCYSTOSIS: THE COST OF HOSPITALIZATION IN THE US**

O'Brien J, Pierce D, Caro J

Caro Research, Concord, MA, USA

Highly active antiretroviral therapy (HAART) has made it possible to retard progression from the HIV positive state to AIDS. Today's health care decision-makers require the examination of the economic, as well as the clinical consequences of emerging therapies. To understand the full economic impact of HAART, it is necessary to examine the cost consequences of transitioning from HIV to AIDS. The occurrence of opportunistic infections hallmarks this transition. **OBJECTIVES:** To determine

the hospitalization costs of pneumocystosis (pneumonia due to *Pneumocystis carinii*), one of the more prevalent opportunistic infections associated with AIDS. **METHODS:** Cost estimates for inpatient care were developed using data from 5 all payer, state 1996/97 discharge databases (CA, FL, MA, MD, WA). A strict hierarchical methodology using ICD9 codes was used to identify AIDS cases admitted primarily for treatment of pneumocystosis. Disposition status was used to identify those who died during hospitalization and post-discharge care. Hospital costs include all accommodation and ancillary services. Physician costs are not included. Costs are reported in 1999 US \$, adjusted appropriately for medical inflation and cost-to-charge ratios. **RESULTS:** Of the 48,782 AIDS-related discharges identified, 1633 (3.3%) were documented to be admitted primarily due to pneumocystosis. During hospitalization, 9% of this group died. The mean cost of hospitalization for those who died (\$31,370) was three times greater than the average cost for those who survived (\$10,420). **CONCLUSIONS:** Pneumocystosis represents a costly manifestation of AIDS and highlights the cost consequences of AIDS management. Thus, understanding the difference in management costs of HIV and AIDS is an integral component of an economic analysis of new HAART regimens.

**PHV8****UNCOMPLICATED ACUTE PYELONEPHRITIS IN ADULT WOMEN: INPATIENT VERSUS OUTPATIENT THERAPY – ECONOMIC COMPARISON**Tibi-Lévy Y<sup>1</sup>, Elkharrat D<sup>2</sup>, de Pourville G<sup>1</sup><sup>1</sup>Groupe-IMAGE, ENSP, Saint-Maurice, France; <sup>2</sup>SAU, Lariboisière Hospital, Paris, France

The traditional treatment of Uncomplicated Acute Pyelonephritis (UAP) is hospitalization and parenteral antibiotic therapy. Some authors suggest that administration of oral antibiotics is as efficient as a traditional treatment and allows ambulatory therapy. **OBJECTIVES:** The study purpose was to compare, with identical demonstrated effectiveness, the resources mobilized according to two ways of managing women with UAP: inpatient versus outpatient therapy. **METHODS:** We achieved a multicentric (16 French emergency wards) and randomized cost-minimization analysis. Direct (fixed and variable costs) and indirect (home help, transport charges, stoppage) costs were calculated prospectively on 252 inpatients and 250 outpatients. Several scenarios about the avoided hospitalizations rate were studied (preferred scenario: reduction of 50%, 15,000 annual hospitalizations). **RESULTS:** Ambulatory treatment reduces by 63% the direct medical costs (US\$ 466 vs US\$ 1278,  $P < 0.001$ ) and of 2.3 days, the sick-leaves. The gain concerns fixed costs, but also variable costs such as investigations. The hypothesis of a transfer of expenditures to patients was not demonstrated (US\$ 29.6 vs US\$ 26.5,  $P = 0.458$ ). If the quality of care is similar (8.8/10 in each